

FIG. 1

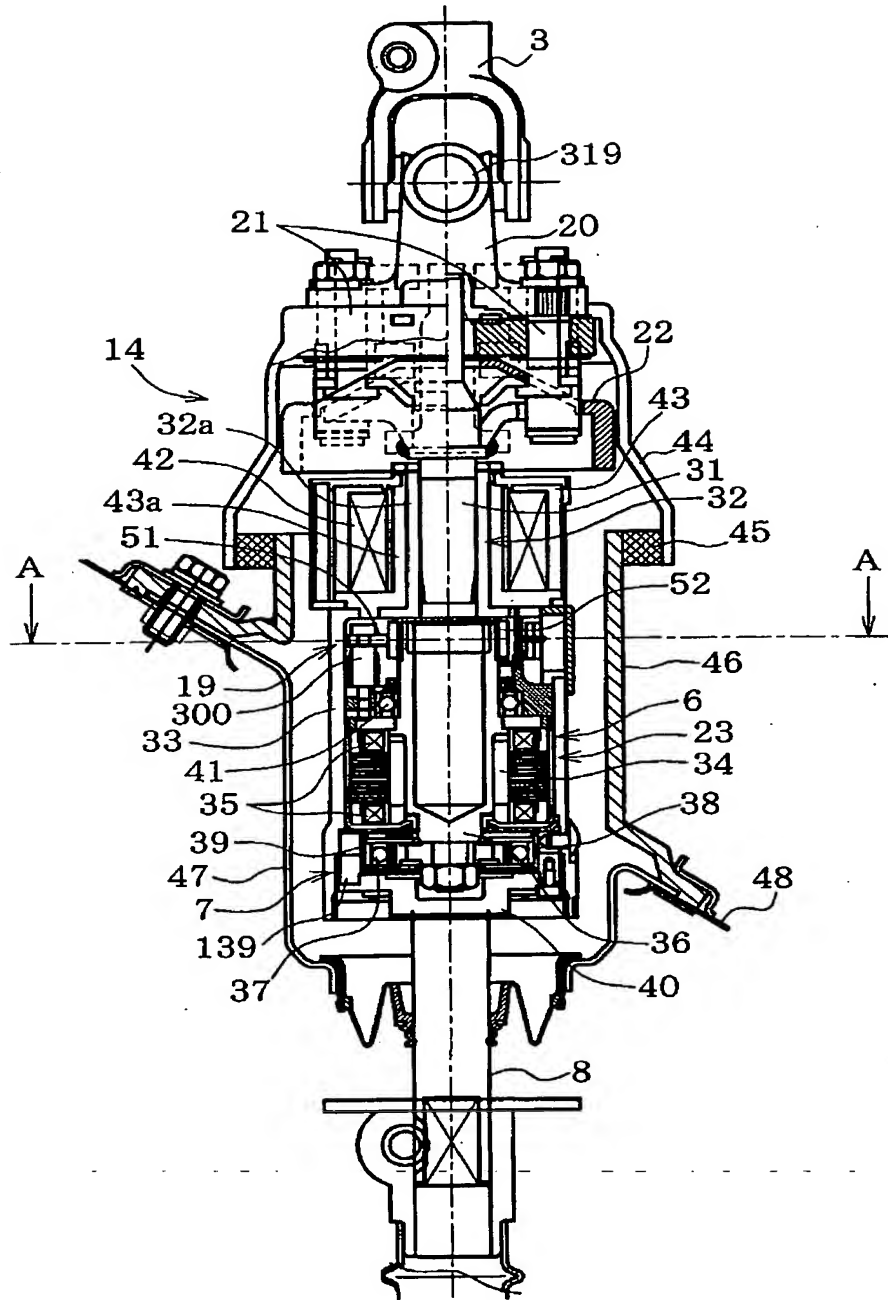


FIG. 2

FIG. 3

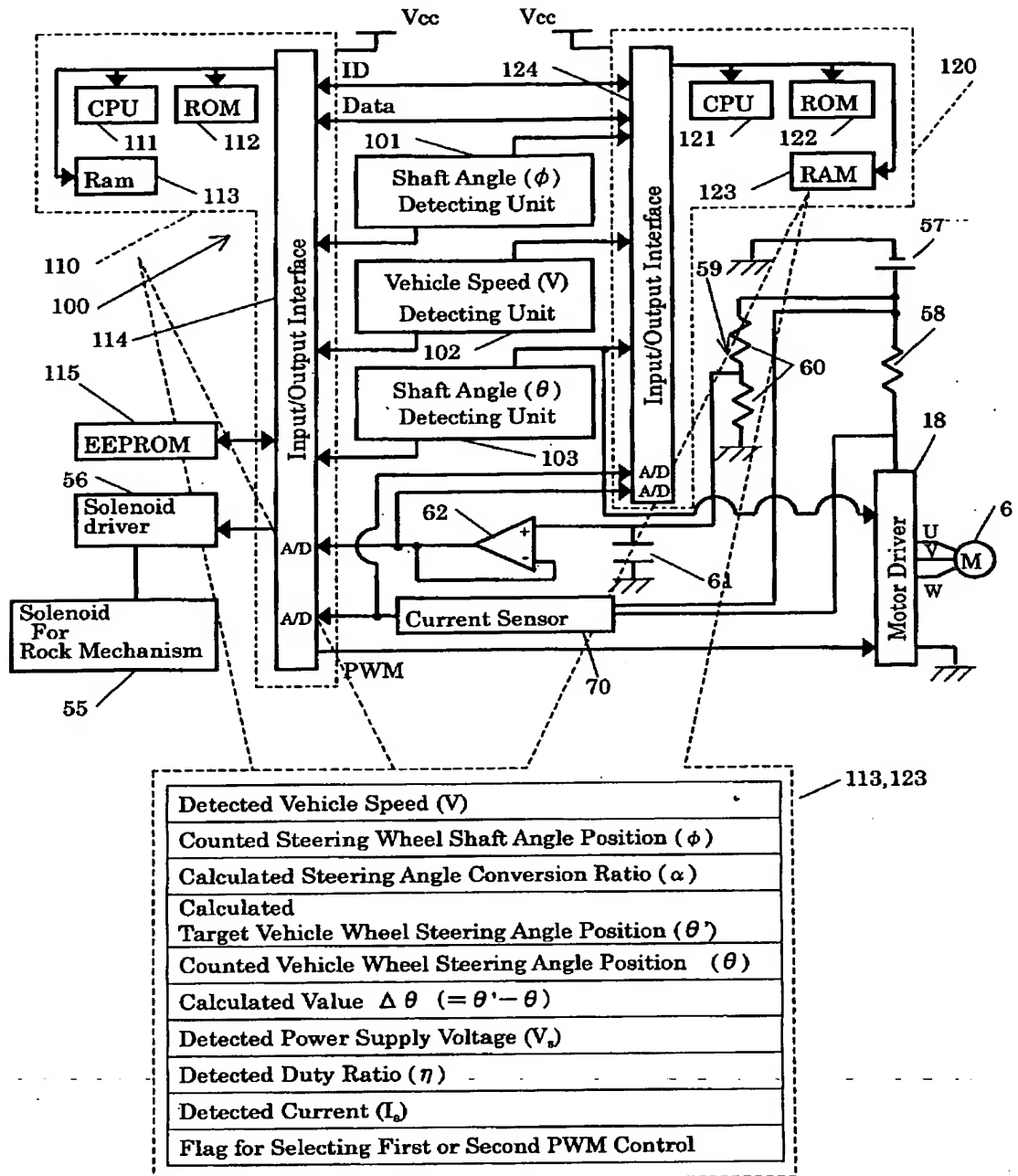


FIG. 4

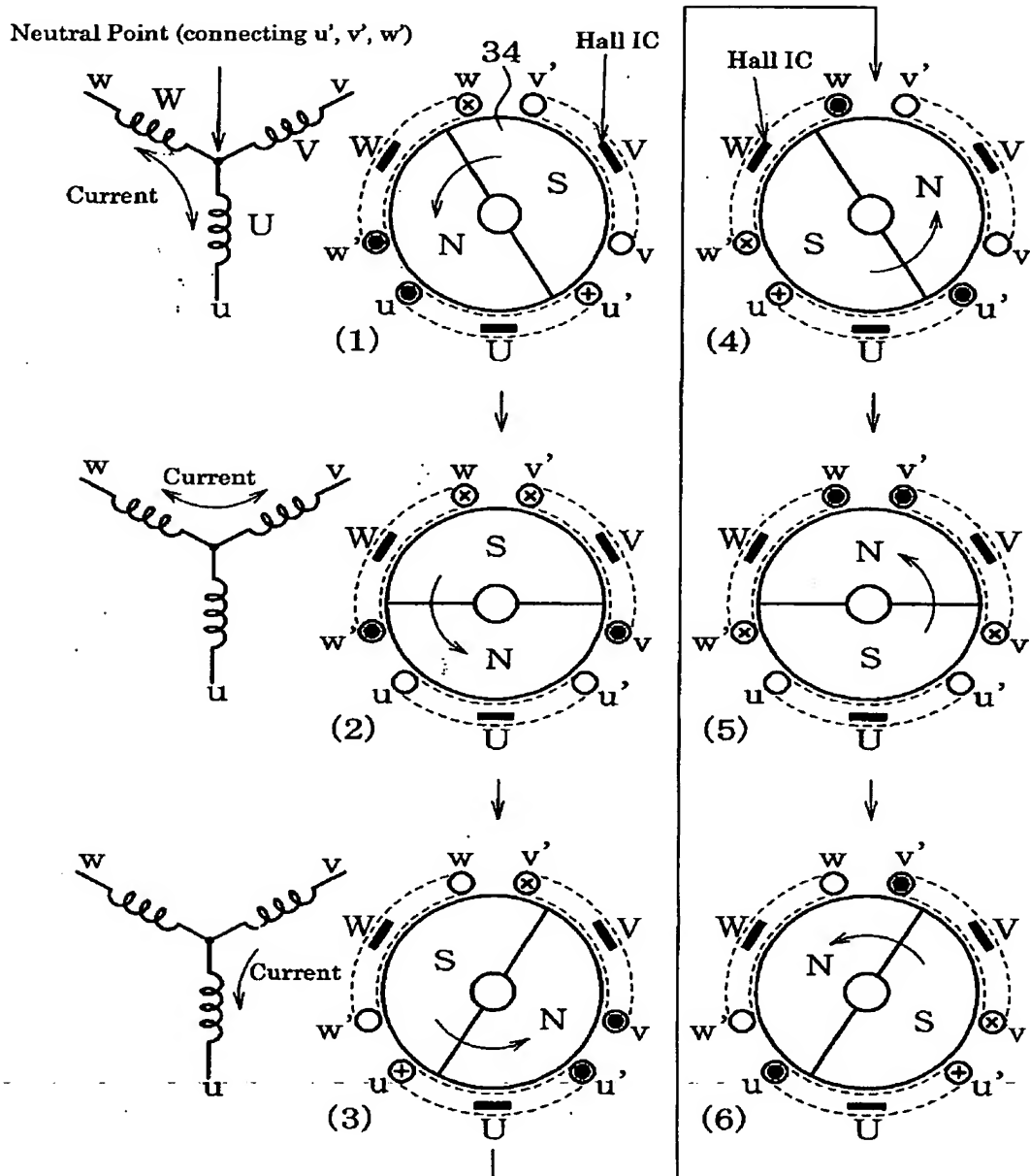


FIG. 5

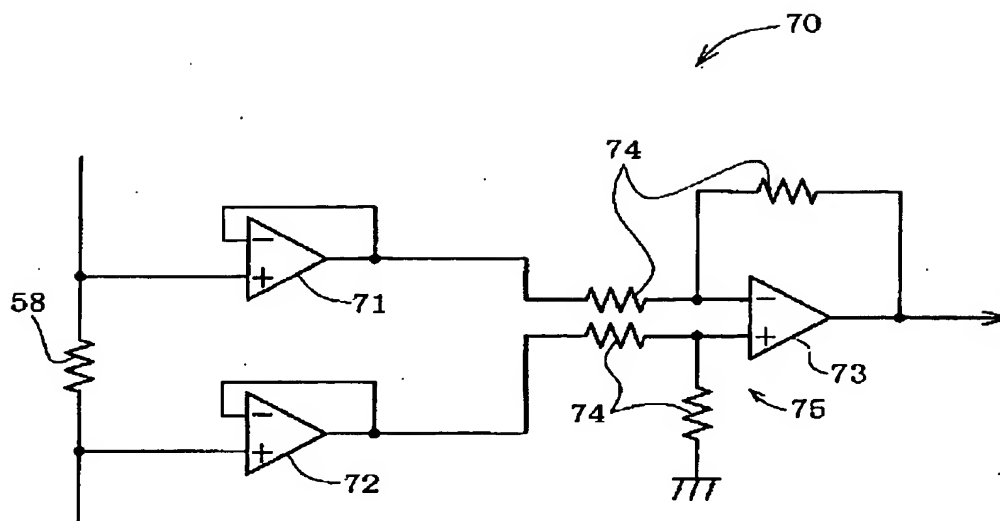


FIG. 6

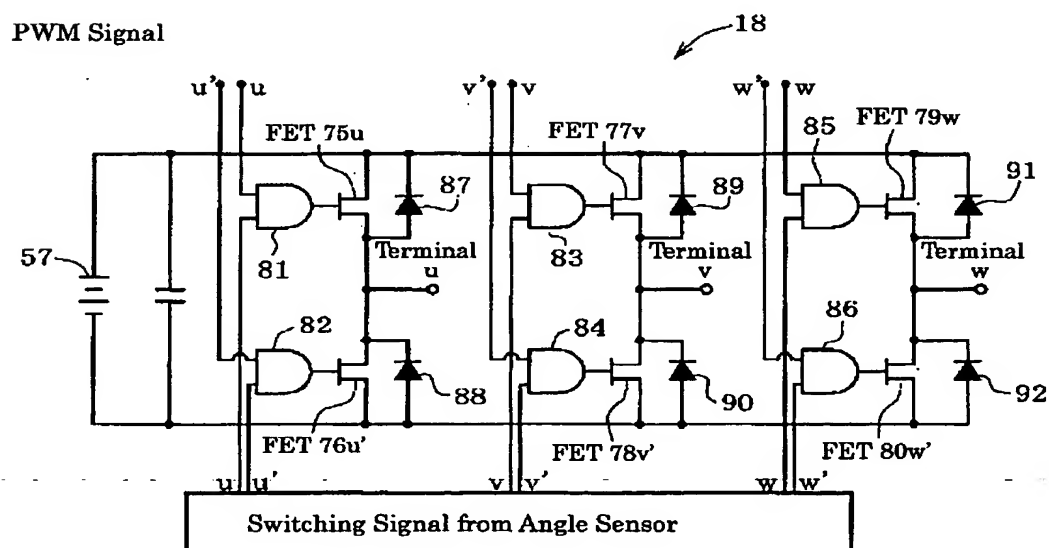


FIG. 7

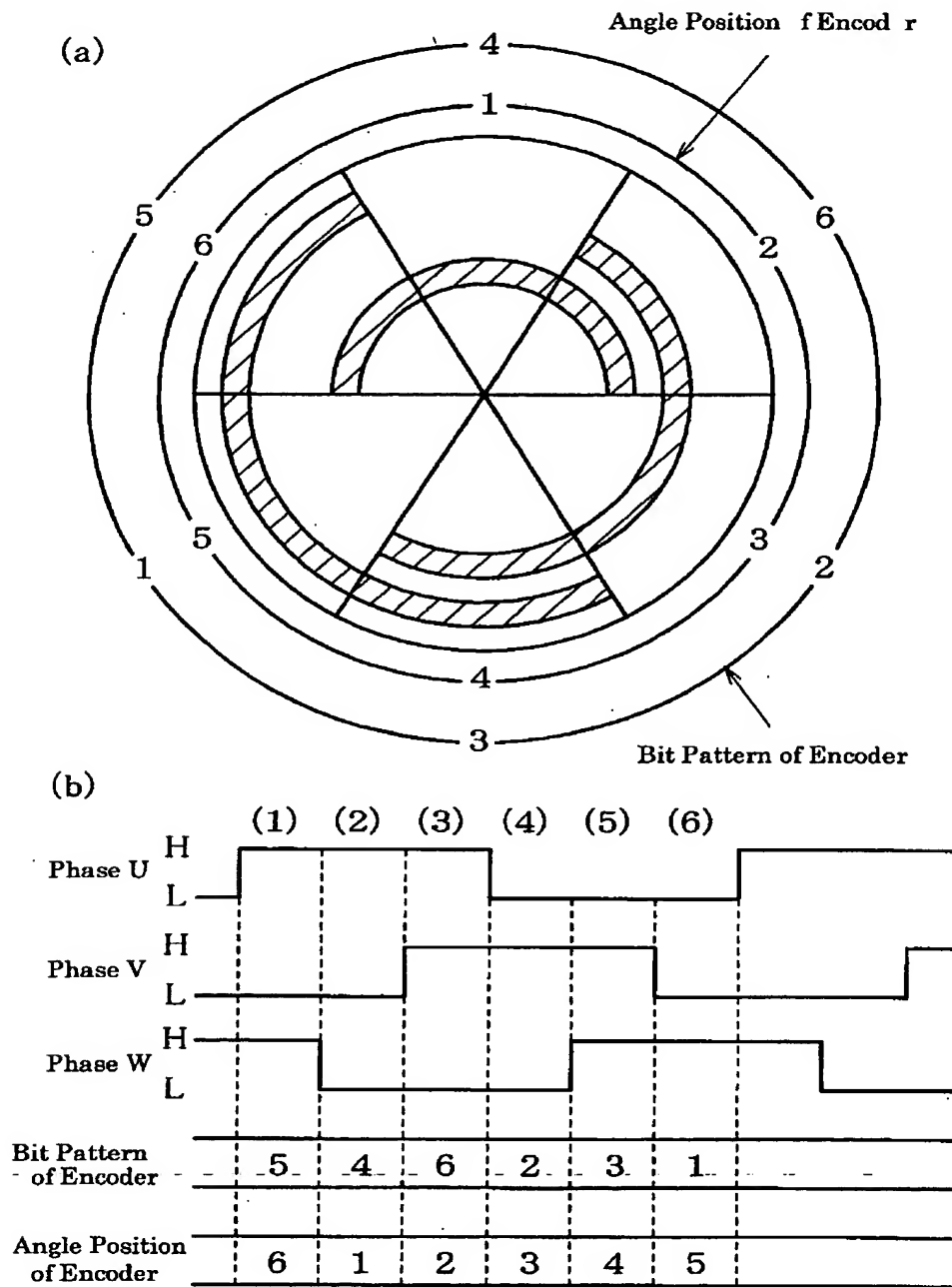


FIG. 8

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Vehicle Speed (V)	V ₁	V ₂	V ₃	V _n
Steering Angle Conversion Ratio (α)	α ₁	α ₂	α ₃		α _n

$\alpha = \theta / \phi$ ϕ : Steering wheel shaft angle position
 θ : Vehicle wheel steering shaft angle position

FIG. 9

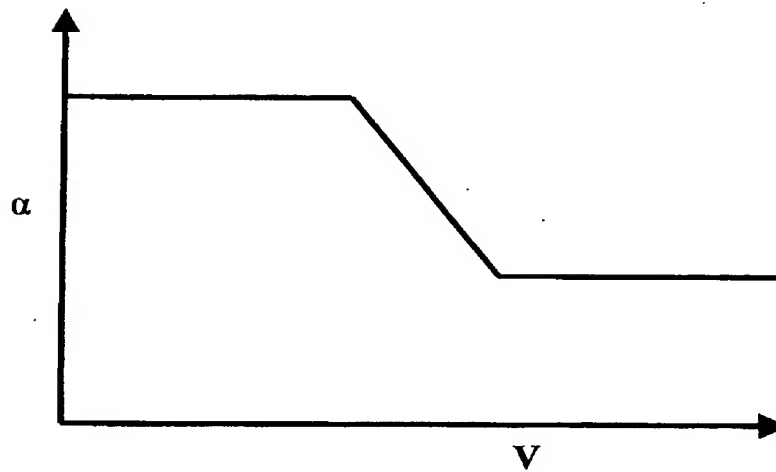


FIG. 10

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$\Delta \theta$ \ V_s	V_{s1}	V_{s2}	V_{s3}	V_{s4}	...	V_{sn}
$\Delta \theta_1$	η_{11}	η_{12}	η_{13}	η_{14}	...	η_{1n}
$\Delta \theta_2$	η_{21}	η_{22}	η_{23}	η_{24}	...	η_{2n}
$\Delta \theta_3$	η_{31}	η_{32}	η_{33}	η_{34}	...	η_{3n}
$\Delta \theta_4$	η_{41}	η_{42}	η_{43}	η_{44}	...	η_{4n}
\vdots	\vdots	\vdots	\vdots	\vdots	\vdots	\vdots
$\Delta \theta_m$	η_{m1}	η_{m2}	η_{m3}	η_{m4}	...	η_{mn}

η : Duty Ratio

$$\Delta \theta = \theta' - \theta$$

θ' : Target vehicle wheel steering shaft angle position

θ : Current vehicle wheel steering shaft angle position

FIG. 11

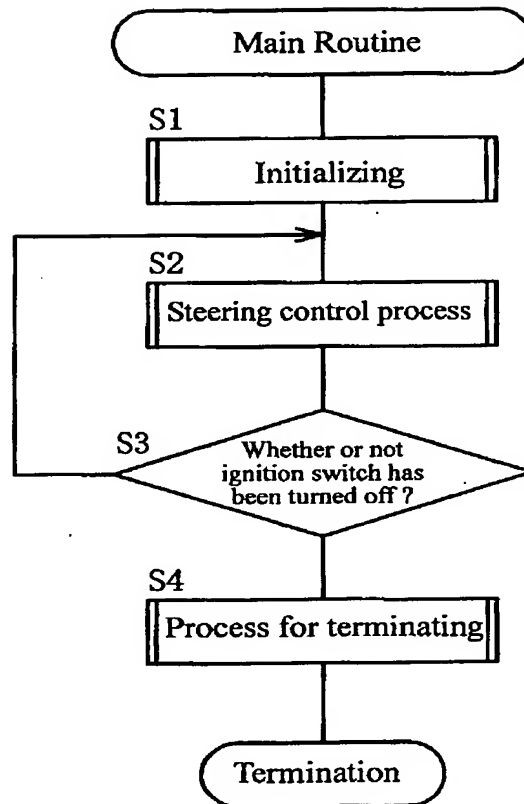


FIG. 12

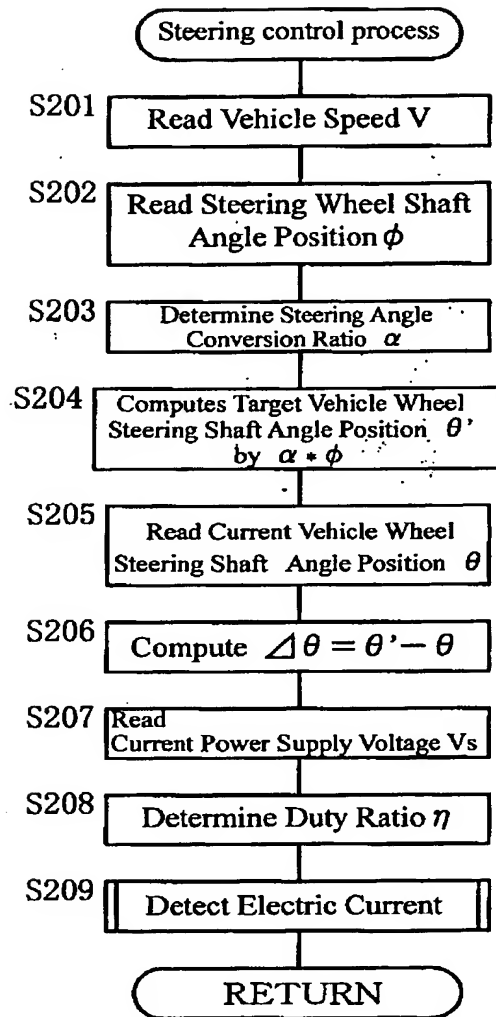


FIG. 13

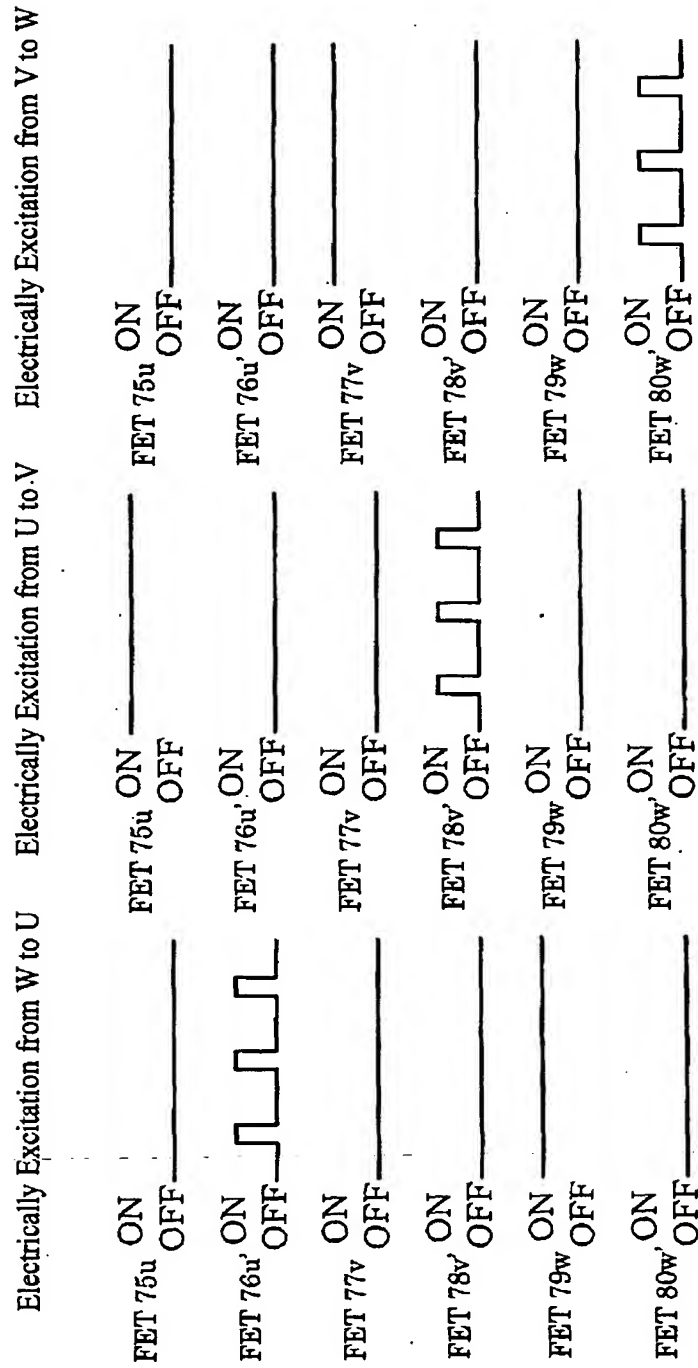


FIG. 14

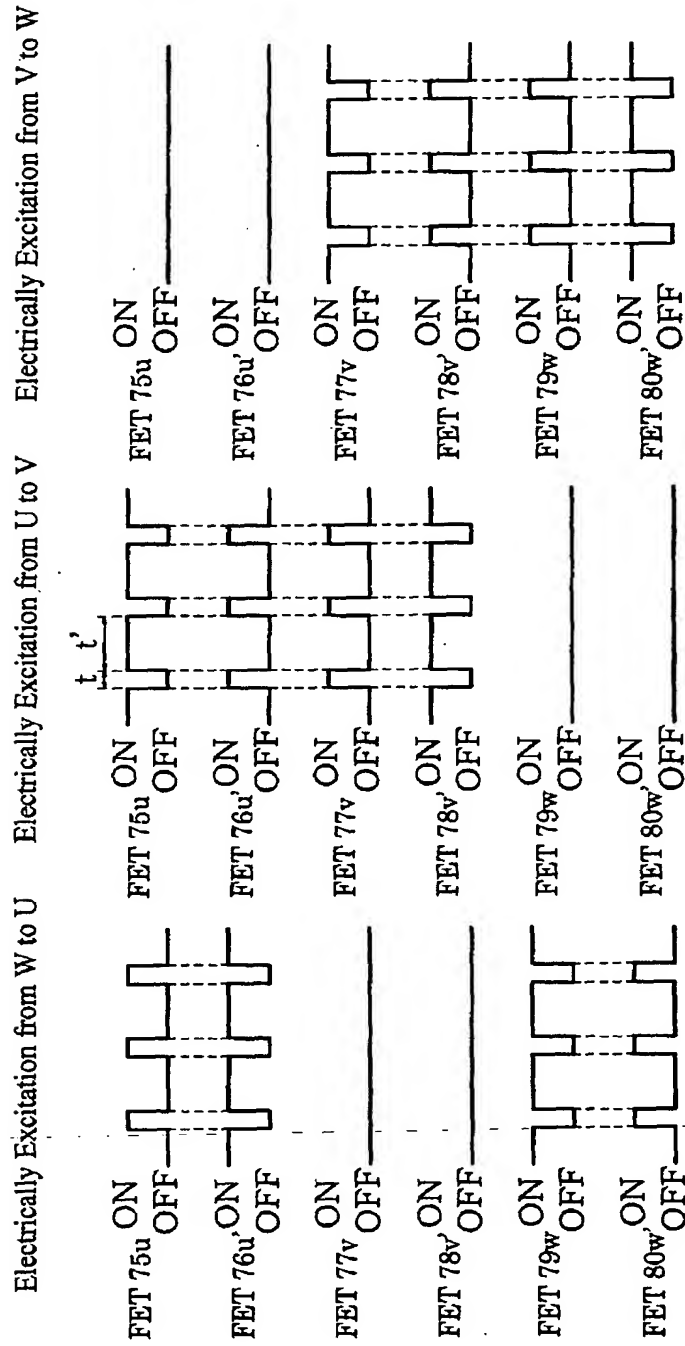


FIG. 15

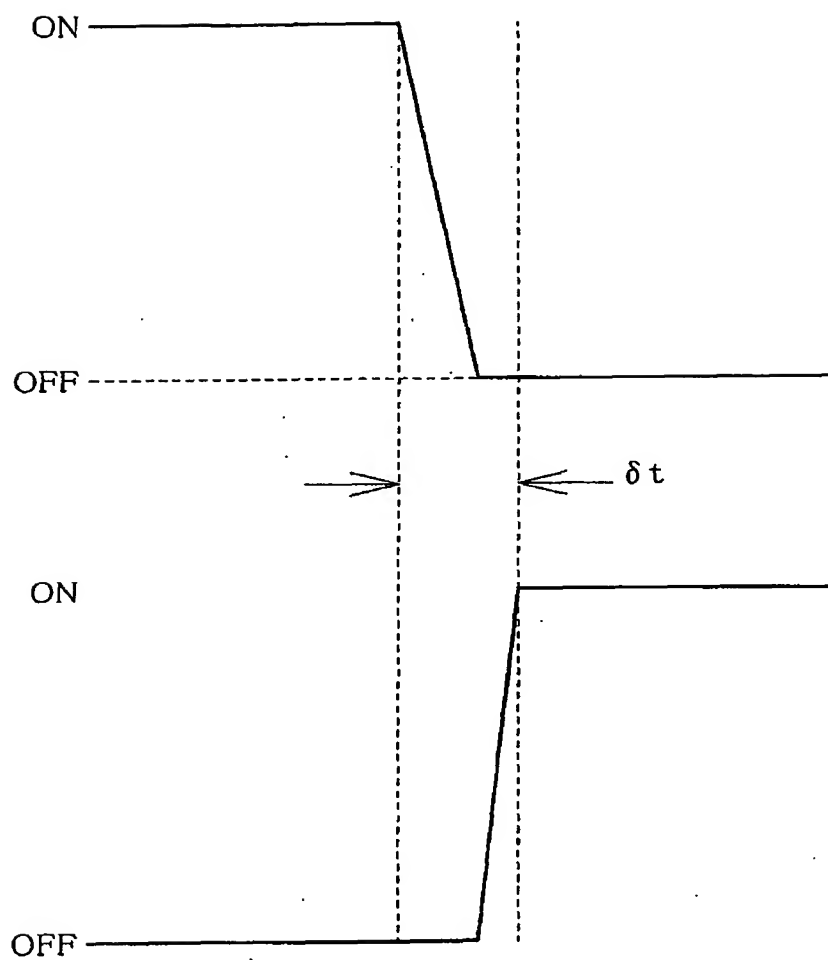


FIG. 16

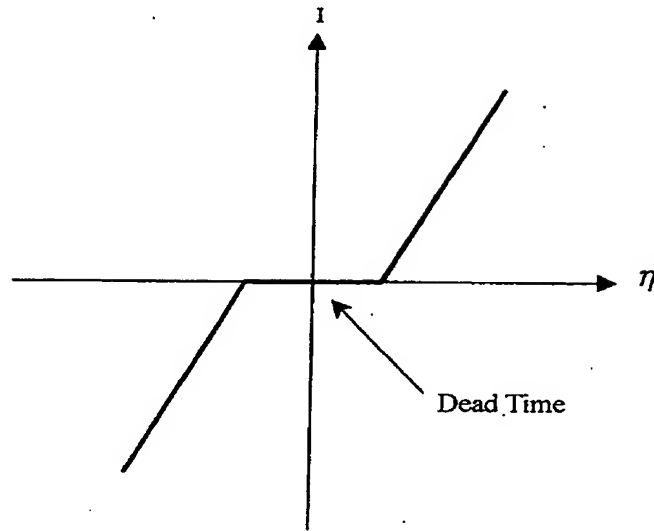


FIG. 17

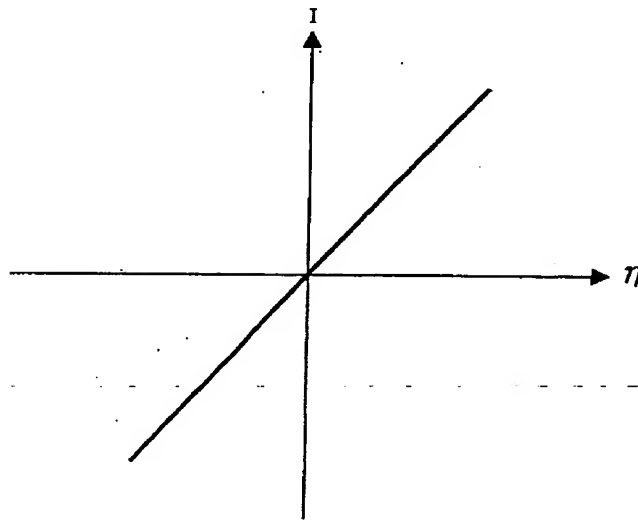


FIG. 18